



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE
355-A Deadmore Street, Abingdon, Virginia 24210
(276) 676-4800 FAX (276) 676-4899

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Jeffrey Hurst
Regional Director

March 5, 2019

Mr. Brett C. Holbrook
Vice President
Buchanan Minerals, LLC
Drawer L
Oakwood, Virginia 24631

Location: Buchanan County, Virginia
Registration No. 10945

Dear Mr. Holbrook:

Attached is a significant modification to the March 20, 2018, Title V permit to operate your Buchanan Preparation Plant Facility pursuant to 9VAC5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This modified permit reflects changes pursuant to 9VAC5-80-230. This permit document replaces the permit document issued on March 20, 2018 (as modified October 15, 2018), however, the expiration date remains unchanged.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all conditions carefully.

In the course of evaluating the application and arriving at a final decision for approval, the Department of Environmental Quality (DEQ) deemed the application complete on November 27, 2018, and solicited written public comments by placing a newspaper advertisement in the *Virginia Mountaineer* on January 17, 2019. The thirty-day required comment period, provided for in 9VAC5-80-270, expired on February 19, 2019, with no comments having been received in this office.

This permit modification approval does not relieve Buchanan Minerals, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

To review any federal rules reference in the attached permit, the US Government Publishing Office maintains the text of these rules at www.ecfr.gov, Title 40, Parts 60, 63 and 70.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

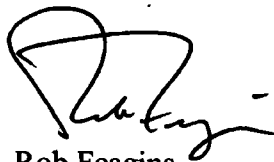
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit modification or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit modification, please call me at (276) 676-4835.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Feagins', with a stylized flourish at the end.

Rob Feagins
Air Permit Manager

GRF/ABM/10945VA.SigMod.FNL-19

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Director, Office of Permits and Air Toxics (3AP10), U.S. EPA, Region III (electronic file submission)



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**Federal Operating Permit
Article 1**

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Buchanan Minerals, LLC
Facility Name:	Buchanan Preparation Plant Facility
Facility Location:	State Route 632, Garden Creek, Buchanan County, Virginia
Registration Number:	10945
Permit Number:	SWRO10945

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act

March 20, 2018

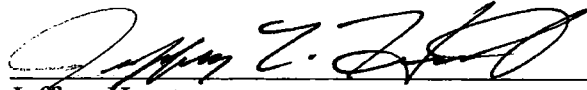
Effective Date

March 5, 2019

Modification Date

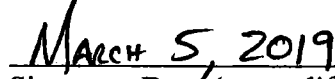
March 19, 2023

Expiration Date

A handwritten signature in black ink, appearing to read "Jeffrey E. Hurst", written over a horizontal line.

Jeffrey Hurst

Regional Director

A handwritten date "March 5, 2019" written in black ink over a horizontal line.

Signature Date (as modified)

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Source Testing Report Format, 1 page

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Facility Information

Permittee
Buchanan Minerals, LLC
Drawer L
Oakwood, Virginia 24631

Responsible Official
Mr. Brett Holbrook
Vice President

Facility
Buchanan Preparation Plant Facility
State Route 632
Garden Creek, Buchanan County, Virginia

Contact Person
Mr. Chris Sturgell
Environmental Engineer
(276) 498-6920

County-Plant Identification Number: 51-027-00081

Facility Description: NAICS 212112 – Bituminous Coal Underground Mining – Coal Preparation Plant – Raw coal is conveyed from the underground mining operation to the processing and preparation plant where it is screened and crushed to separate coal from refuse prior to entering the wet preparation plant, which includes density separation and froth flotation to further separate coal from refuse. Cleaned coal may be dried using a thermal dryer fired by either coal bed methane or coal, or sent directly to storage or load-out for shipment by railcar or truck.

NAICS 213113 – Coal Support Services – Mine drainage water is desalinated to recover road salt and produce water that may be discharged or reused in the preparation plant and mine.

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
Underground Coal Mine							
BM1	Various vent shafts	Underground coal mine	1250 TPH	Not Applicable (N/A)	N/A	N/A	N/A
Coal Processing and Preparation Equipment							
S001A	Z01	Hoist #1 dump to 100-ton surge bin BIN1	1200 TPH	Partial enclosure	D001	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S001B	Z01	Skip to ground	300 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S001C	Z01	BIN1 feeder to rotary breaker RB1 pre-screens SC1	1200 TPH	Full enclosure	D002	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S001E	Z01	SC1 underflow to raw coal silo RCS1 feed conveyor C1	1200 TPH	Full enclosure	D004	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S001F	Z01	SC1 overflow to rotary breaker RB1	1200 TPH	Full enclosure	D005	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S001H	Z01	RB1 breaker reject to breaker reject conveyor C15	1200 TPH	Full enclosure	D007	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S001I	Z01	RB1 breaker reject conveyor C15 to reject crusher CR1	1200 TPH	Full enclosure	D008	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S002	Z01	RB1 product to raw coal silo RCS1 feed conveyor C1	1200 TPH	Full enclosure	D010	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S003	Z01	Feeder to reclaim hopper	300 TPH	Partial enclosure	D011	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S004	Z01	Reclaim hopper to conveyor No. 2	300 TPH	Partial enclosure	D012	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S005	Z01	Conveyor No. 2 to reclaim crusher	300 TPH	Partial enclosure	D013	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S006	Z01	Reclaim crusher	300 TPH	Full enclosure	D014	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S007	Z01	Reclaim crusher to conveyor No. 3	300 TPH	Partial enclosure	D015	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S008	Z01	Conveyor No. 3 to conveyor No. 1	300 TPH	Partial enclosure	D016	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S009	Z01	Conveyor No. 1 to raw coal silo RCS1	1200 TPH	Full enclosure	D017	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S011	Z01	Raw coal silo to conveyor No. 4	1100 TPH	Full enclosure	D018	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S012	Z01	Rail car load-out chute No. 1	100 TPH	Stationary chute No. 1	D019	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S013	Z01	Rail car load-out chute No. 2	100 TPH	Stationary chute No. 2	D020	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S014	Z01	Conveyor No. 4 to preparation plant	1100 TPH	Full enclosure	D021	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S015	Z01	Preparation plant (froth flotation)	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S015A	P001	Vacuum filtration	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S015B	Z01	Thickener	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S016	Z01	TD1 feed conveyor C6 to thermal dryer TD1	560 TPH	Full enclosure	D046	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S017	P002	Thermal dryer #1 - gas firing	560 TPH	Venturi scrubber	D022	PM/PM10, SO ₂	7/30/04 (as amended 8/24/05 & 6/18/18)
S017A	P002	Thermal dryer #1 - coal firing	560 TPH	Venturi scrubber	D022	PM/PM10, SO ₂	7/30/04 (as amended 8/24/05 & 6/18/18)
S018	Z01	TD1 reclaim conveyor C8 to clean coal silo CCS 1 feed conveyor C9	560 TPH	Full enclosure	D023	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S019	Z01	Conveyor C 5 (TD1 by-pass) to CCS 1 feed conveyor C9	560 TPH	Full enclosure	D023	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S020	Z01	Conveyor C19 to CCS1 feed conveyor C9	300 TPH	Full enclosure	D023	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S021	Z01	Feed conveyor C9 to clean coal silo CCS1	2400 TPH	Full enclosure	D024	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S022	Z01	CCS1 feed conveyor C9 to clean coal stacking tube feed conveyor C10	2400 TPH	Full enclosure	D024	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S023	Z01	Conveyor C10 to clean coal stockpile CCSP1 stacking tube ST1	2400 TPH	Partial enclosure	D025	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S025	Z01	Dozer grading clean coal stockpile CCP1	500 TPH	Water spray	D026	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S026	Z01	CCP1 under-pile feeder to reclaim conveyor C11	4000 TPH	Full enclosure	D027	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S027	Z01	CCP1 reclaim conveyor C11 to rail load-out conveyor C13	4000 TPH	Full enclosure	D028	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S028	Z01	CCS1 reclaim feeder to reclaim conveyor C12	4000 TPH	Full enclosure	D054	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S029	Z01	CCS1 reclaim conveyor C12 to rail load-out conveyor C13	4000 TPH	Full enclosure	D028	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S030	Z01	Rail load-out conveyor C13 to rail load-out	4000 TPH	Full enclosure	D029	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S032	Z01	Rail car loading through telescopic chute	4000 TPH	Telescopic chute	D030	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S033	Z01	Truck loading through stationary chute	200 TPH	Stationary chute No. 3	D031	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S034	Z01	Conveyor No. 17 to house coal load-out	200 TPH	Partial enclosure	D032	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S035	Z01	Truck loading of house coal	25 TPH	Stationary chute No. 4	D033	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S036	Z01	Conveyor No. 17 to Conveyor No. 18	200 TPH	Partial enclosure	D032	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S037	Z01	Conveyor No. 18 to truck load-out feeder	200 TPH	Partial enclosure	D033	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S038	Z01	Truck load-out feeder to truck load-out No. 1	200 TPH	Partial enclosure	D034	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S039	Z01	Truck load-out feeder to truck load-out No. 2	200 TPH	Partial enclosure	D035	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S040	Z01	Stationary chute truck loading No. 1	125 TPH	Stationary chute No. 5	D036	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S041	Z01	Stationary chute truck loading No. 2	125 TPH	Stationary chute No. 6	D037	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S042	Z01	Reject crusher CR1 to refuse bin BIN2	500 TPH	Full enclosure	D038	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S044	Z01	Conveyor No. 14 to refuse bin	500 TPH	Partial enclosure	D039	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S045	Z01	Refuse conveyor C16 to mountain refuse bin BIN3	1200 TPH	Full enclosure	D040	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S046	Z01	Mountain refuse bin BIN3 stationary chute to refuse truck loading	1200 TPH	Stationary chute No. 7	D041	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S047	Z01	Refuse truck dumping onto refuse pile	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S048	Z01	Dozer grading refuse pile	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S049	Z01	Refuse bin BIN2 dumping onto ground	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S050	Z01	End-loading refuse trucks	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S052	Z01	Truck dumping clean coal onto temporary clean coal stockpile CCP2	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S053	Z01	Dozer grading temporary stockpile CCP2	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S054	Z01	End-loading clean coal trucks	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
S055	Z01	Unpaved roads	73,000 VMT	Water spray	D042	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S056	P003	Rock dust silo	100 Tons	Fabric vent filter	D043	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S057	P004	Magnetite silo	50 Tons	Fabric vent filter	D044	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S058	Z01	Preparation plant PP1 fine clean coal conveyor C5	560 TPH	Full enclosure	D021	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S059	Z01	Conveyor C5 to thermal dryer TD1 feed conveyor C6	560 TPH	Full enclosure	D045	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S060	Z01	TD1 product to conveyor C7	560 TPH	Full enclosure	D046	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S061	Z01	TD1 product conveyor C7 to TD1 reclaim conveyor C8	560 TPH	Full enclosure	D047	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S062	Z01	PP1 coarse clean coal to conveyor C19	300 TPH	Full enclosure	D021	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S063	Z01	Stacking tube ST1 to clean coal stockpile CCP1	2400 TPH	Drop height	D048	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S064	Z01	PP1 refuse to main plant refuse conveyor C14	500 TPH	Full enclosure	D021	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S065	Z01	Refuse bin BIN2 to conveyor C16	1200 TPH	Full enclosure	D049	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
S208	Z01	Transfer conveyor to raw coal silo #2	650 TPH	Partial enclosure	D208	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
SC1	Z01	Rotary breaker 1 scalping screen	1200 TPH	Full enclosure	D003	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
CCP1	Z01	Main clean coal stockpile	3.5 acres	Water spray	D026	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
CR1	Z01	Reject crusher 1 for RB1	1200 TPH	Full enclosure	D009	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
RB1	Z01	Rotary breaker 1	1200 TPH	Full enclosure	D006	PM/PM10	7/30/04 (as amended 8/24/05 & 6/18/18)
RCP1	Z01	Temporary raw coal stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05 & 6/18/18)
GEN2		2004 Caterpillar model 3412 emergency generator with a Caterpillar model 3412 diesel engine	600 kW & 896 HP	N/A	N/A	N/A	N/A
GEN3		2012 Generac model SD300 emergency generator with an Iveco/FPT diesel engine	300kW & 480 HP	N/A	N/A	N/A	N/A
Mine Water Treatment Equipment							
EG		2009 Generac model SD250 emergency generator with a diesel engine	250 kW & 384 hp	N/A	N/A	N/A	N/A
S125	P005	Soda ash silo	20 TPH	Fabric filter baghouse	C01	PM/PM10	1/23/09 (as amended 10/28/09 & 8/26/11)
S126	P006	Hydrated lime silo	20 TPH	Fabric filter baghouse	C02	PM/PM10	1/23/09 (as amended 10/28/09 & 8/26/11)
S127	P007	Hydrochloric acid tank	14 TPH	Fume scrubber	C03	HCl	1/23/09 (as amended 10/28/09 & 8/26/11)
S128	P008	Andritz DDC fluid bed salt dryer	7.2 TPH	Fabric filter baghouse	C05	PM/PM10	1/23/09 (as amended 10/28/09 & 8/26/11)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S129	P009	Agglomerator/Crusher/Screen	5 TPH	Fabric filter baghouse	C05	PM/PM10	1/23/09 (as amended 10/28/09 & 8/26/11)
S130	Z02	Wheeled loader to trucks	5 TPH	Enclosure	N/A	PM/PM10	1/23/09 (as amended 10/28/09 & 8/26/11)

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

VMT = vehicle miles traveled

TPH = tons per hour

Underground Coal Mine Requirements - (Emission Unit ID: BM1)

1. **Underground Coal Mine Requirements - (BM1) - Limitations** - The permittee shall not cause or permit to be discharged into the atmosphere from the underground coal mine any particulate emissions in excess of the limits calculated using the following equation:

$$E = 55.0 P^{0.11} - 40,$$

Where:

E = emission rate in pounds per hour, and
P = process weight rate in tons per hour.

The process weight rate for continuous or long-run steady-state process operations is the total process weight for the entire period of continuous operation or for a typical portion of it, divided by the number of hours of such period or portion of it.
(9VAC5-40-260 D and 9VAC5-80-110)

2. **Underground Coal Mine Requirements - (BM1) - Limitations** - Visible emissions from underground coal mine vent shaft exhausts shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-50-80 and 9VAC5-80-110)
3. **Underground Coal Mine Requirements - (BM1) - Monitoring** - The permittee shall visually observe each active underground coal mine vent shaft exhaust at least once each calendar quarter to determine if there are any visible emissions (does not include condensed water vapor/steam). If during the visual observation, visible emissions are observed, a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, EPA Method 9, shall be conducted on each coal mine vent shaft exhaust with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 20 percent opacity, the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 VEE shall not be required if the visible emission condition is corrected as expeditiously as possible such that no visible emissions are present; the coal mine is operating at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, identification of the vent shaft exhaust, the applicable emission requirement, the results of the observation and the name of the observer.
(9VAC5-80-110)

4. **Underground Coal Mine Requirements - (BM1) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- a. Daily and annual production rate of raw coal in tons per hour from the underground coal mine. Annual production shall be calculated monthly as the sum of each consecutive 12-month period.
 - b. Each visual observation and the results of each VEE for underground coal mine vent shafts as required in Condition 3 of this permit.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-50-50 and 9VAC5-80-110)

5. **Underground Coal Mine Requirements - (BM1) - Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9VAC5-80-110)

Coal Processing and Preparation Equipment Requirements - (Emission Unit ID: S017/S017A, GEN2, GEN3, and various coal processing and preparation equipment)

6. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Limitations** - Particulate emissions from the coal preparation plant shall be controlled using the following methods:
- a. Coal conveying and storage equipment will be covered. Freeze-up of wet suppression systems at raw coal transfer points shall be prevented by wrapping exposed piping with electric heating tape.
 - b. Screening, crushing, transfer and handling of the coal shall be controlled by a wet type dust collector, spray systems, enclosure or equivalent control systems.
 - c. Coal cleaning and associated processing equipment shall be enclosed in the main building and shall utilize a wet process.
 - d. Coal refuse handling shall utilize high moisture content.
 - e. The thermal dryer shall be equipped with a high energy venturi scrubber.

- f. The open coal stockpiles shall be controlled by wet suppression.
 - g. The rail load-out station shall be equipped with a flood loading chute that will telescope down into the hopper cars.
 - h. Rock dust and magnetite silo vents shall be equipped with fabric filters.
 - i. Haul roads and parking areas shall be watered using a water truck and/or paved.
(9VAC5-80-110 and Condition 3 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
7. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Limitations** - The production of clean coal from the facility shall not exceed 8.4 million tons per year, calculated monthly as the sum of each consecutive 12-month period.
(9VAC5-80-110 and Condition 6 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
8. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Limitations** - The approved fuels for the thermal dryer are bituminous coal, coal-bed methane gas and natural gas. A change in fuels may require a permit to modify and operate.
(9VAC5-80-110 and Condition 7 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
9. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Limitations** - The differential pressure drop across the venturi scrubber shall be a minimum of 21.7 inches of water.
(9VAC5-80-110 and Condition 8 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
10. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Limitations** - Emissions from the operation of the thermal dryer shall not exceed the limits specified below:

Particulate Matter	0.025 gr/dscf	125.3 tons/yr
PM10	0.019 gr/dscf	95.0 tons/yr
Sulfur Dioxide	0.20 lb/MMBtu	119.6 tons/yr
Nitrogen Oxides (as NO ₂)	0.46 lb/MMBtu	278.1 tons/yr
Volatile Organic Compounds	0.60 lb/MMBtu	362.7 tons/yr

Carbon Monoxide	2.34 lb/MMBtu	1,414.7 tons/yr
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The PM10 emissions are derived from the total PM emissions by applying a factor of 0.76. Exceedance of the PM limit may be considered credible evidence of the exceedance of the PM-10 limit. Annual emissions shall be determined on a consecutive 12-month basis. (9VAC5-80-110 and Condition 9 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))

11. **Coal Processing and Preparation Equipment Requirements - (various units) - Limitations** - Emissions from the operation of the coal processing and conveying equipment, coal storage equipment, and coal transfer and loading equipment shall not exceed the limits specified below:

Particulate Matter	20.05 lb/hr	45.73 tons/yr
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PM10	7.53 lb/hr	15.79 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 6 and 7. Annual emissions shall be determined on a consecutive 12-month basis. (9VAC5-80-110 and Condition 10 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))

12. **Coal Processing and Preparation Equipment Requirements - (various units) - Limitations** - Emissions from the operation of the coal processing and conveying equipment, coal storage equipment, and coal transfer and loading equipment shall not exceed the limits specified below:

Volatile Organic Compounds	53.1 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 7. Annual emissions shall be determined on a consecutive 12-month basis. (9VAC5-80-110 and Condition 11 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))

13. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Limitations** - The average sulfur content of the bituminous coal to be burned in the thermal dryer shall not exceed 1.0% by weight, calculated as the average of each consecutive 30-day period.
(9VAC5-80-110 and Condition 12 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
14. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Limitations** - Visible emissions from the thermal dryer and each piece of coal processing, conveying, storage, transfer and loading equipment shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-50-410, 40 CFR 60.252(a)(2), 9VAC5-80-110 and Condition 13 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
15. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Limitations** - Except where this permit is more restrictive than the applicable requirement, the equipment subject to NSPS, Subpart Y shall be operated in compliance with the requirements of 40 CFR 60, Subpart Y.
(9VAC5-50-400, 9VAC5-50-410, 9VAC5-80-110 and Condition 14 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
16. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Limitations** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment, monitoring devices and process equipment which affect such emissions:
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
 - b. Maintain an inventory of spare parts.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. The permittee shall maintain records of training provided including the names of trainees, the date of training and the nature of the training.
(9VAC5-80-110 and Condition 22 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
17. **Coal Processing and Preparation Equipment Requirements - (GEN2) - Limitations** - The permittee shall maintain the Caterpillar emergency diesel generator engine as follows:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first;

- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The permittee may utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in paragraph a of this condition. If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice on the required schedule, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. The permittee must report any failure to perform the management practice on the schedule required and the federal, state, or local law under which the risk was deemed unacceptable. (9VAC5-60-100, 9VAC5-80-110, 40 CFR 63.6603(a), and 40 CFR Part 63, Subpart ZZZZ, Footnote 2 of Table 2d)

18. Coal Processing and Preparation Equipment Requirements - (GEN2) - Limitations -
Except where this permit is more restrictive than the applicable requirement, the permittee shall at all times operate and maintain the Caterpillar emergency diesel generator engine as follows:

- a. In compliance with applicable requirements of 40 CFR Part 63, Subpart ZZZZ.
- b. In a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by 40 CFR Part 63, Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6605(a) and (b))

19. Coal Processing and Preparation Equipment Requirements - (GEN2) - Limitations -
The permittee shall operate and maintain the Caterpillar emergency diesel generator engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6625(e)(3))

20. Coal Processing and Preparation Equipment Requirements - (GEN2) - Limitations –

The permittee shall minimize the Caterpillar emergency diesel generator engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6625(h))

21. Coal Processing and Preparation Equipment Requirements - (GEN2) - Limitations –

The permittee must operate the Caterpillar emergency diesel generator engine according to the requirements in paragraphs a through c of this condition. In order for the engine to be considered an emergency stationary reciprocating internal combustion engine (RICE) under 40 CFR Part 63, Subpart ZZZZ, any operation other than emergency operation, maintenance, and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs a through c of this condition, is prohibited. If the engine is not operated according to the requirements in paragraphs a through c of this condition, the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ and must meet all requirements for non-emergency engines indicated in 40 CFR Part 63, Subpart ZZZZ.

a. There is no time limit on the use of the Caterpillar emergency diesel generator engine in emergency situations.

b. The Caterpillar emergency diesel generator engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but the petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

c. The Caterpillar emergency diesel generator engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6640(f)(1), (f)(2)(i) and (f)(4))

22. **Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –**
The permittee must comply with the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for the Generac emergency diesel generator engine.
(9VAC5-50-410, 9VAC5-80-110, 40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2))
23. **Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –**
The permittee shall operate and maintain the Generac emergency diesel generator engine such that it achieves the emission standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 over the entire life of the engine.
(9VAC5-50-410, 9VAC5-80-110 and 40 CFR 60.4206)
24. **Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –**
The Generac emergency diesel generator engine must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
(9VAC5-50-410, 9VAC5-80-110 and 40 CFR 60.4207(b))
25. **Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –**
The permittee must do all of the following for the Generac emergency diesel generator engine:
 - a. Operate and maintain the Generac emergency diesel generator engine and control device according to the manufacturer's emission-related written instructions;
 - b. Change only those emission-related settings that are permitted by the manufacturer; and
 - c. Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply.
(9VAC5-50-410, 9VAC5-80-110 and 40 CFR 60.4211(a)(1), (a)(2) and (a)(3))
26. **Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –**
Except as permitted in Condition 27 of this permit, the permittee must install and configure the Generac emergency diesel generator engine according to the manufacturer's emission-related specifications.
(9VAC5-50-410, 9VAC5-80-110 and 40 CFR 60.4211(c))
27. **Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –**
If the Generac emergency diesel generator engine is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - a. Keep a maintenance plan and records of conducted maintenance;

- b. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
 - c. Conduct an initial performance test in accordance with 40 CFR 60.4212 (a) through (e) to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after the engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer.
- (9VAC5-50-410, 9VAC5-80-110, 40 CFR 60.4211(g)(2), and 40 CFR 60.4212)

28. Coal Processing and Preparation Equipment Requirements - (GEN3) - Limitations –

The permittee must operate the Generac emergency diesel generator engine according to the requirements in paragraphs a through c of this condition. In order for the engine to be considered an emergency stationary internal combustion engine (ICE) under 40 CFR Part 60, Subpart IIII, any operation other than emergency operation, maintenance, and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs a through c of this condition, is prohibited. If the engine is not operated according to the requirements in paragraphs a through c of this condition, the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII and must meet all requirements for non-emergency engines indicated in 40 CFR Part 60, Subpart IIII.

- a. There is no time limit on the use of the Generac emergency diesel generator engine in emergency situations.
- b. The Generac emergency diesel generator engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but the petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- c. The Generac emergency diesel generator engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(9VAC5-50-410, 9VAC5-80-110 and 40 CFR 60.4211(f)(1), (f)(2)(i) and (f)(3))

29. **Coal Processing and Preparation Equipment Requirements - (GEN2 and GEN3) - Limitations** – Visible emissions from the Caterpillar emergency diesel generator engine exhaust and the Generac emergency diesel generator engine exhaust shall not exceed 20 percent opacity except during one six-minute period in any on hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9VAC5-80-110 and 9VAC5-50-80)
30. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Monitoring** - The permittee shall conduct an annual inspection on each cyclone to insure structural integrity.
(9VAC5-80-110)
31. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Monitoring** - The permittee shall install, calibrate, maintain and continuously operate the following:
- a. A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit.
 - b. A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gage.
 - c. A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within $\pm 5\%$ of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point.
 - d. A monitoring device for the measurement of the thermal drying chamber temperature.

Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be recalibrated annually. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the thermal dryer is operating.
(9VAC5-50-410, 9VAC5-80-110, 40 CFR 60.256(a) and Condition 4 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))

32. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Monitoring** - The monitoring devices used to continuously measure the thermal dryer and associated control system parameters shall be observed by the permittee with a frequency of not less than once per hour. The permittee shall keep a log of the observations or continuously record measurements from the monitoring devices.
(9VAC5-80-110 and Condition 5 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
33. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Monitoring** - The permittee shall visually observe the thermal dryer exhaust stack at least once each calendar week to determine if there are any visible emissions while operating (does not include condensed water vapor/steam). If during the visual observation, visible emissions are observed, a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, EPA Method 9, shall be conducted on the thermal dryer exhaust stack. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 20 percent opacity, the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 VEE shall not be required if the visible emission condition is corrected as expeditiously as possible such that no visible emissions are present; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable emission requirement, the results of the observation and the name of the observer.
(9VAC5-80-110)

34. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Monitoring** - The permittee shall monitor, operate, calibrate and maintain the devices listed in Condition 31 of this permit according to the following:

Thermal Dryer Compliance Assurance Monitoring Plan

	Indicator No. 1	Indicator No. 2	Indicator No. 3	Indicator No. 4
I. Indicator	Exhaust Gas Temperature	Pressure Loss	Water Supply Pressure	Thermal drying chamber temperature
A. Measurement Approach	Temperature probe	Differential pressure gage	Pressure gage	Temperature probe
II. Indicator Range	An excursion is defined as an exit gas temperature greater than 160 °F	An excursion is defined as a pressure loss through the scrubber of less than 21.7 inches water column	An excursion is defined as a water supply pressure of less than 15 pounds per square inch gage	An excursion is defined as a drying chamber temperature greater than 1,400 °F
III. Performance Criteria				
A. Data Representativeness	The temperature probe monitors the temperature of the gas at the exit of the thermal dryer	The differential pressure gage monitors the static pressures upstream and downstream of the scrubber's venturi throat	The water pressure gage monitors water supply pressure to the scrubber. The gage is to be located close to the water discharge point.	The temperature probe monitors the temperature at the entrance to the drying chamber (just below the restriction deck) of the thermal dryer
B. Verification of Operational Status	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests
C. QA/QC Practices and Criteria	The device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit and calibrated annually based on the manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within ± 1 inch water gage and calibrated annually based on the manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within $\pm 5\%$ of design water supply pressure and calibrated annually based on the manufacturers recommendations	The device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit and calibrated annually based on the manufacturer's recommendations
D. Monitoring Frequency	Measure continuously	Measure continuously	Measure continuously	Measure continuously
E. Data Collection Procedures	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder
F. Averaging Period	None	None	None	None

(9VAC5-80-110 and 40 CFR 64.6 (c))

35. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9VAC5-80-110 and 40 CFR 64.6 (c))
36. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (9VAC5-80-110 and 40 CFR 64.7 (b))
37. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the thermal dryer is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions. (9VAC5-80-110 and 40 CFR 64.7 (c))
38. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the thermal dryer (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9VAC5-80-110 and 40 CFR 64.7(d)(1))

39. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9VAC5-80-110 and 40 CFR 64.7(d)(2))
40. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9VAC5-80-110 and 40 CFR 64.7(e))
41. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the thermal dryer for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
- a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
- (9VAC5-80-110 and 40 CFR 64.8(a) and (b))

42. **Coal Processing and Preparation Equipment Requirements - (various units) - Monitoring** - The permittee shall visually observe all coal processing, conveying, storage, transfer and loading equipment at least once each calendar week to determine which operating emissions units have visible emissions (does not include condensed water vapor/steam). If during the visual observation, visible emissions are observed, a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, EPA Method 9, shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 20 percent opacity, the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 evaluation shall not be required if the visible emission condition is corrected as expeditiously as possible such that no visible emissions are present; the emissions unit is operating at normal conditions; and the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable emission requirement, the results of the observation and the name of the observer.
(9VAC5-80-110)
43. **Coal Processing and Preparation Equipment Requirements - (GEN2) - Monitoring** - The permittee shall install a non-resettable hour meter for the Caterpillar emergency diesel generator engine.
(9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6625(f))
44. **Coal Processing and Preparation Equipment Requirements - (GEN2) - Monitoring** - The permittee shall continuously comply with the work and management practices applicable to the Caterpillar emergency diesel generator engine as required by the following:
- a. Operating and maintaining the engine according to the manufacturer's emission-related operation and maintenance instructions; or
 - b. Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- (9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6640(a))
45. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- a. The production of clean coal from the facility, calculated monthly as the sum of each consecutive 12-month period.

- b. The production of dried coal from the thermal dryer, calculated monthly as the sum of each consecutive 12-month period.
- c. The consumption of coal, coal-bed methane and natural gas, indicating sulfur content for the coal for the thermal dryer, calculated monthly as the sum of each consecutive 12-month period.
- d. The temperature of the thermal dryer gas exhaust, pressure loss through the venturi constriction of control equipment on the dryer, control equipment water supply pressure and temperature of the thermal drying chamber, recorded hourly.
- e. The DEQ approved, pollutant-specific emission factors and the equations used to demonstrate compliance with Condition 10.
- f. Each weekly visual observation and the results of each VEE for the thermal dryer as required in Condition 33.
- g. The log of annual inspections for the cyclones.
- h. All stack tests and performance evaluations.
- i. Each weekly visual observation and the results of each VEE for the coal processing equipment as required in Condition 42.
- j. Maintenance and training as required in Condition 16.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-50-410, 9VAC5-80-110 and Condition 16 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))

46. **Coal Processing and Preparation Equipment Requirements - (GEN2) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters for the Caterpillar emergency diesel generator engine necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- a. Manufacturer's emission-related operation and maintenance instructions or the permittee-developed maintenance plan for the Caterpillar emergency diesel generator engine as required in Condition 44.
 - b. Maintenance conducted under the maintenance plan developed in accordance with Condition 44.

- c. Hours of operation that is recorded through the non-resettable hour meter, including how many hours are spent for emergency operation, what classified the operation as emergency and how many hours are spent for non-emergency operation.

These records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1), and as specified in §63.10(b)(1), each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). (9VAC5-60-100, 9VAC5-80-110, 40 CFR 63.6655(d) – (f), and 40 CFR 63.6660(a) – (c))

- 47. **Coal Processing and Preparation Equipment Requirements - (S017/S017A) - Testing -** Once every five years and upon request by the DEQ, the permittee shall conduct performance tests for particulate matter, sulfur dioxide, oxides of nitrogen as nitrogen dioxide, carbon monoxide and volatile organic compounds from the thermal dryer to demonstrate compliance with the emission limits contained in this permit. The thermal dryer shall be exempt from testing for sulfur dioxide when the thermal dryer furnace is being fueled by coal-bed methane or natural gas. The details of the tests shall be arranged with the Director, Southwest Regional Office. One copy of the test results shall be submitted to the Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9VAC5-80-110 and Condition 15 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
- 48. **Coal Processing and Preparation Equipment Requirements - (S017/S017A and various units) - Testing -** The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations. (9VAC5-80-110 and Condition 17 of PSD permit dated 7/30/04 (as amended 8/24/05 and 6/18/18))
- 49. **Coal Processing and Preparation Equipment Requirements - (GEN2) - Reporting -** The permittee must report each instance in which the requirements applicable to the Caterpillar emergency diesel generator engine in Table 8 to 40 CFR Part 63, Subpart ZZZZ are not met. (9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6640(e))
- 50. **Coal Processing and Preparation Equipment Requirements - (GEN2) - Reporting -** The permittee must report, in regards to the Caterpillar emergency diesel generator engine, all deviations as defined in 40 CFR Part 63, Subpart ZZZZ in the semiannual monitoring report required by Condition 85 of this permit. (9VAC5-60-100, 9VAC5-80-110 and 40 CFR 63.6650(f))

Mine Water Treatment Equipment Requirements – (Emission Unit ID: S125, S126, S128 – S130, and EG)

51. **Mine Water Treatment Equipment Requirements - (S125 and S126) - Limitations -** Particulate emissions from the soda ash silo and hydrated lime silo shall be controlled by fabric filter baghouses. The baghouses shall be provided with adequate access for inspection and shall be in operation during material transfer operations.
(9VAC5-80-110 and Condition 2 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
52. **Mine Water Treatment Equipment Requirements - (S128) - Limitations -** Particulate emissions from the fluid bed salt drying system shall be controlled by a fabric filter baghouse. The baghouse shall be provided with adequate access for inspection and shall be in operation when the salt dryer is operating.
(9VAC5-80-110 and Condition 3 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
53. **Mine Water Treatment Equipment Requirements - (S129) - Limitations -** Particulate emissions from the salt press, salt crusher and salt screen shall be controlled by a fabric filter baghouse. The baghouse shall be provided with adequate access for inspection and shall be in operation when the press, crusher, or screen is operating.
(9VAC5-80-110 and Condition 4 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
54. **Mine Water Treatment Equipment Requirements - (S130) - Limitations -** Particulate emissions from the salt storage and load-out shall be controlled by partial enclosure. The enclosure shall be provided with adequate access for inspection.
(9VAC5-80-110 and Condition 5 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
55. **Mine Water Treatment Equipment Requirements - (S125) - Limitations -** The throughput of soda ash to the soda ash storage silo shall not exceed 2,190 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 7 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
56. **Mine Water Treatment Equipment Requirements - (S126) - Limitations -** The throughput of hydrated lime to the hydrated lime storage silo shall not exceed 3,760 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for

the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 8 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

57. **Mine Water Treatment Equipment Requirements - (S128) - Limitations** - The production of dried salt from the fluid bed salt drying system shall not exceed 43,800 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9VAC5-80-110 and Condition 9 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

58. **Mine Water Treatment Equipment Requirements - (S128) - Limitations** - The approved fuel for the fluid bed salt dryer is natural gas. A change in fuel may require a permit to modify and operate.
(9VAC5-80-110 and Condition 10 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

59. **Mine Water Treatment Equipment Requirements - (S128 and 129) - Limitations** - Total combined emissions from the operation of the fluid bed salt drying system, salt press, salt crusher and salt screen as exhausted through the two fabric filter baghouses and common stack shall not exceed the limits specified below:

Particulate Matter	0.014 gr/dscf	2.50 lb/hr	10.92 tons/yr
PM10		0.63 lb/hr	2.73 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 52, 53, 58, 62 and 63.

(9VAC5-80-110, 9VAC5-50-410, 40 CFR 60.672(a) and Condition 11 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

60. **Mine Water Treatment Equipment Requirements - (S125 and S126) - Limitations** - Visible emissions from the soda ash storage silo and hydrated lime storage silo fabric filter baghouse exhausts shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-80-110 and Condition 12 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

61. **Mine Water Treatment Equipment Requirements - (S130) - Limitations** - Visible emissions from salt storage and load-out shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-80-110 and Condition 13 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
62. **Mine Water Treatment Equipment Requirements - (S128 and S129) - Limitations** - Visible emissions from the fluid bed salt drying system, salt press, salt crusher and salt screen fabric filter baghouses' common exhaust shall not exceed 7 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9VAC5-50-410, 9 VAC 5-80-110 and Condition 14 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
63. **Mine Water Treatment Equipment Requirements - (S129) - Limitations** - Except where this permit is more restrictive than the applicable requirement, the equipment subject to NSPS Subpart OOO shall be operated in compliance with the requirements of 40 CFR 60, Subpart OOO.
(9VAC5-50-400, 9VAC5-50-410, 9VAC5-80-110 and Condition 15 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))
64. **Mine Water Treatment Equipment Requirements - (EG) - Limitations** - The permittee shall comply with the emission standards for 2007 model year and later non-road compression ignition engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for the emergency generator engine. The permittee shall operate and maintain the engine that achieves the emission standards over the entire life of the engine.
(9VAC5-80-110, 40 CFR 60.4205(b) and 40 CFR 60.4206)
65. **Mine Water Treatment Equipment Requirements - (EG) - Limitations** - The approved fuel for the emergency generator engine is diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel.
(9VAC5-80-110 and 40 CFR 60.4207(b))
66. **Mine Water Treatment Equipment Requirements - (EG) - Limitations** – The permittee must do all of the following, except as permitted under 40 CFR 60.4211(g):
 - a. Operate and maintain the emergency generator engine and control device according to the manufacturer's emission-related written instructions;
 - b. Change only those emission-related settings that are permitted by the manufacturer; and

- c. Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to the emergency generator engine.
(9VAC5-80-110 and 40 CFR 60.4211(a))
- 67. **Mine Water Treatment Equipment Requirements - (EG) - Limitations** - Except as permitted in 40 CFR 60.4211(g), the emergency generator engine must be installed and configured according to the manufacturer's emission-related specifications.
(9VAC5-80-110 and 40 CFR 60.4211(c))
- 68. **Mine Water Treatment Equipment Requirements - (EG) - Limitations** - The permittee must operate the emergency generator engine according to the requirements in paragraphs a through c of this condition. In order for the engine to be considered an emergency stationary internal combustion engine (ICE) under 40 CFR Part 60, Subpart IIII, any operation other than emergency operation, maintenance, and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs a through c of this condition, is prohibited. If the engine is not operated according to the requirements in paragraphs a through c of this condition, the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII and must meet all requirements for non-emergency engines indicated in 40 CFR Part 60, Subpart IIII.
 - a. There is no time limit on the use of the emergency generator engine in emergency situations.
 - b. The emergency generator engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but the petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - c. The emergency generator engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
(9VAC5-80-110 and 40 CFR 60.4211(f))
- 69. **Mine Water Treatment Equipment Requirements - (S128 and S129) - Monitoring** - Except as specified in 40 CFR 60.674(d), the permittee shall conduct quarterly 30-minute visible emissions inspections on the common exhaust for the salt dryer, salt press, salt

crusher and salt screen using EPA Method 22 (40 CFR Part 60, Appendix A-7). The Method 22 test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the permittee must initiate corrective action within 24 hours to return the baghouse to normal operation. The permittee must record each Method 22 test, including the date and any corrective actions taken, in the logbook required under 40 CFR 60.676(b). (9VAC5-80-110, 9VAC5-50-410 and 40 CFR 60.674(c))

70. Mine Water Treatment Equipment Requirements - (S125 and S126) - Monitoring -

The permittee shall visually observe the soda ash storage silo baghouse exhaust and hydrated lime storage silo baghouse exhaust at least once each calendar week while the observed silo is being loaded to determine which emissions units have visible emissions (does not include condensed water vapor/steam). If during the visual observation, visible emissions are observed, a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, EPA Method 9, shall be conducted on those units with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 5 percent opacity, the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 VEE shall not be required if the visible emission condition is corrected as expeditiously as possible such that no visible emissions are present; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable emission requirement, the results of the observation and the name of the observer. (9VAC5-80-110)

71. Mine Water Treatment Equipment Requirements - (S130) - Monitoring - The

permittee shall visually observe salt storage and load-out at least once each calendar week to determine which operation has visible emissions (does not include condensed water vapor/steam). If during the visual observation, visible emissions are observed, a visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, EPA Method 9, shall be conducted on those operations with visible emissions. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 10 percent opacity, the VEE shall be conducted for a total of sixty (60) minutes. A Method 9 VEE shall not be required if the visible emission condition is corrected as expeditiously as possible such that no visible emissions are present; the operation is at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the operation, the applicable emission requirement, the results of the observation and the name of the observer. (9VAC5-80-110)

72. **Mine Water Treatment Equipment Requirements - (S125, S126, S128, S129, S130 and EG) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of soda ash to the soda ash storage silo, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual throughput of hydrated lime to the hydrated lime storage silo, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Annual production of dried salt from the fluid bed salt dryer, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. All stack test results, visible emission observations and evaluation results and performance evaluations.
 - e. Scheduled and unscheduled maintenance, and operator training.
 - f. Each quarterly inspection of the common exhaust for the salt dryer, salt press, salt crusher and salt screen as required in Condition 69, in a logbook in written or electronic format. The permittee must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the DEQ upon request.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110, 9VAC5-50-410, 40 CFR 60.676(b)(1) and Condition 16 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

73. **Mine Water Treatment Equipment Requirements - (S125, S126, S128, S129, S130 and EG) - Testing** - The permitted facility shall be constructed and modified so as to allow for emissions testing upon reasonable notice at any time using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9VAC5-80-110 and Condition 6 of minor NSR permit dated 1/23/09 (as amended 10/28/09 and 8/26/11))

Insignificant Emission Units

74. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
INS-01	Storage Tanks	5-80-720 B.2	VOC	N/A
INS-02	Emergency Dryer Bypass	5-80-720 B	VOC, NO _x , SO ₂ , PM10 & CO	N/A
INS-03	Thermal Dryer Pre-Igniters	5-80-720 B	VOC, NO _x , SO ₂ , PM10 & CO	N/A
S031	Rail Car Load-out Sprays	5-80-720 B.2	VOC	N/A

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC5-80-110)

Permit Shield & Inapplicable Requirements

75. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None identified		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9VAC5-80-110 and 9VAC5-80-140)

General Conditions

76. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9VAC5-80-110)
77. **General Conditions - Permit Expiration** - This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
78. **General Conditions - Permit Expiration** - The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
79. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
80. **General Conditions - Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
81. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

82. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)
83. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
(9VAC5-80-110)
84. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9VAC5-80-110)
85. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedances of emissions limitations or operational restrictions;

- ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110)

86. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
 - b. The identification of each term or condition of the permit that is the basis of the certification;
 - c. The compliance status;
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
 - e. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
 - f. Such other facts as the permit may require to determine the compliance status of the source; and

- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov
(9VAC5-80-110)

87. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Southwest Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 85 of this permit. (9VAC5-80-110 F.2)
88. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office. (9VAC5-80-110 and 9VAC5-20-180)
89. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9VAC5-80-110)
90. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9VAC5-80-110)

91. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9VAC5-80-110)
92. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9VAC5-80-110, 9VAC5-80-190 and 9VAC5-80-260)
93. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9VAC5-80-110)
94. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9VAC5-80-110)
95. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.
(9VAC5-80-110)
96. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9VAC5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9VAC5-80-110, 9VAC5-80-340 and 9VAC5-80-2340)

97. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
(9VAC5-50-90 and 9VAC5-80-110)
98. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9VAC5-50-20 E and 9VAC5-80-110)
99. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to

all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.
(9VAC5-80-110)

100. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
- (9VAC5-80-110)
101. **General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:
- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.
- (9VAC5-80-110)

102. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9VAC5-80-110 and 9VAC5-80-150)
103. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
(9VAC5-80-110 and 9VAC5-80-160)
104. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
(9VAC5-80-110 and 9VAC5-80-160)
105. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.
(9VAC5-80-110 and 9VAC5-80-160)
106. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9VAC5-80-110, 9VAC5-80-190 C and 9VAC5-80-260)
107. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9VAC5-80-110 and 9VAC5-80-80 E)

108. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(9VAC5-80-110 and 40 CFR Part 82)
109. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9VAC5-60-70 and 9VAC5-80-110)
110. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(9VAC5-80-110 and 40 CFR Part 68)
111. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9VAC5-80-110)
112. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.
(9VAC5-80-110)

Source Testing Report Format

Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Tester; name, address and report date

Certification

1. Signed by team leader / certified observer (include certification date)
- *2. Signed by reviewer

Introduction

1. Test purpose
2. Test location, type of process
3. Test dates
- *4. Pollutants tested
5. Test methods used
6. Observers' names (industry and agency)
7. Any other important background information

Summary of Results

1. Pollutant emission results / visible emissions summary
2. Input during test vs. rated capacity
3. Allowable emissions
- *4. Description of collected samples, to include audits when applicable
5. Discussion of errors, both real and apparent

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Process and control equipment data

*** Sampling and Analysis Procedures**

1. Sampling port location and dimensioned cross section
2. Sampling point description
3. Sampling train description
4. Brief description of sampling procedures with discussion of deviations from standard methods
5. Brief description of analytical procedures with discussion of deviation from standard methods

Appendix

- *1. Process data and emission results example calculations
2. Raw field data
- *3. Laboratory reports
4. Raw production data
- *5. Calibration procedures and results
6. Project participants and titles
7. Related correspondence
8. Standard procedures

* Not applicable to visible emission evaluations.